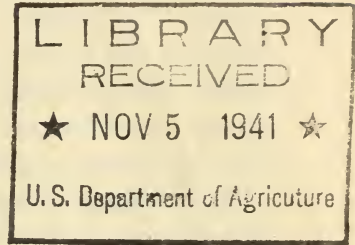


Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

Minimum Requirements for Farmhouses



W-97

Recommended by the
United States Department of Agriculture

Introduction

These minimum requirements for farm dwellings represent the judgment of Department of Agriculture agencies which have had first-hand experience with rural housing problems and have gained considerable knowledge of the kind of homes farm people want. They are based on conclusions reached after extensive study by technicians representing these agencies.

Although at the present time all regular construction, urban and rural, must take second place to the needs of national defense, the Department has two purposes in issuing this publication. The minimum requirements herein set forth may be of assistance to those already building or planning to build farm homes. Also, it is hoped a statement of minimum standards for rural housing may assist those in the Government and in private groups who are studying and planning for a post-war world in which the Nation will be able to make full use of its manpower and resources for the benefit of the American people. The Department of Agriculture offers these minimum standards as part of its contribution towards formulating plans for post-war programs of rural welfare.

It should be noted that these minimum requirements are not intended as a complete guide for planning or building a house, and neither will they meet the needs of many who desire a far more comfortable home than is suggested here. Other Department publications, already available, suggest plans and offer technical information on the building of farm homes to suit a wide variety of tastes and circumstances.

In recommending minimum requirements for farmhouses, the United States Department of Agriculture has considered the essentials for good social and healthful living.

With the constantly improving building practices and the development of new building materials, it is hoped that eventually all rural families will find within their means a house meeting these minimum requirements, and it is recommended that every possible effort be made in present farmhouse construction to meet them.

Some of the requirements mentioned in this publication, such as a watertight roof and a site well drained, will seem obvious to many readers. Those who have a first-hand knowledge of rural housing in America, however, can testify to the large number of farm homes in which the most obvious requirements have not been met.

Choosing a Site

The site should be well drained. Where it is part of the farm to be operated by the occupant of the house, the site should be suitably located in relation to farm buildings. Where the housing is provided for families of farm laborers with year-round tenure, sufficient land should be available to raise food for the family. The site should permit the safe disposal of all refuse. The space required will vary with the region and soil conditions.

A supply of good water must be available, preferably from wells or springs providing water at all times. Wells, springs, or cisterns should be covered and so located as to preclude any possibility of pollution. For privacy and to avoid dust and noise, the house should not be closer than 50 feet to the road, and where roads are not surfaced, should be located

beyond the dust line (usually 100 to 150 feet). Where practicable, consideration should be given to locating the house with reference to shade trees.

Construction Features Contributing to Comfort and Livability

In general, the house should be substantial enough to be usable for 30 years or more without excessive maintenance. For livability and ease of care, the following details of construction should be specified:

Floors should be tight and so finished as to permit easy cleaning.

Walls should be tight and constructed for comfortable temperature, winter and summer. The required construction will vary with the climate. The inner wall surfaces should be durable and easily cleaned or renewed. Inner walls and ceiling, of whatever materials or finish, should be of colors that will reflect a reasonably high percentage of light.

The ceiling should be insulated with a minimum of $1\frac{1}{2}$ -inch insulation board or the equivalent. In warm climates there should be adequate provision for ventilation of any air space between ceiling and roof. Ceiling height should be not less than approximately 7 feet 4 inches. This is based on the use of 7-foot studding.

Except in the mildest climate a continuous foundation or curtain walls between piers should be provided where the first floor is raised above the ground. There should be screened openings which may be closed in winter in such foundation or walls, so located as to permit cross draft for summer ventilation.

The roof should be tight to water at all seasons. Windows should be glazed and all openings to the exterior, except to screened porches, should be screened.

Space Requirements

Space requirements cannot and need not be stated for all circumstances. The following seem to be the minimum requirements for families with both boys and girls. The

provision for a family with children of both sexes should be generally adhered to in farm housing, because the make-up of the farm family changes, and there may be changes in tenancy.

The arrangement for living, dining, and kitchen space usually should accord with the custom of the region. Where economy is of the utmost importance, all may be provided in one room, although a separate living room and kitchen with dining space provided in one or the other is much more desirable. A separate dining room is not recommended for the minimum house because of the additional cost involved.

Where dining space is provided in the living room the total space in this room should be not less than 210 square feet. Where the living room is not used for dining purposes its size may be reduced if necessary to 150 square feet.

Where dining space is provided in the kitchen, the total space in this room should be not less than 144 square feet. Where the kitchen is not used for dining, its size may be reduced to not less than 84 square feet. The kitchen work space should be rectangular, and approximately 9 feet in width. Equipment opposite a coal- or wood-burning range should not be closer than 4 feet.

Where living, dining, and kitchen space are all provided in one room, the space should be not less than 300 square feet. If two rooms are provided, and the dining space therefore becomes a part of either the living room or the kitchen, the usefulness of the dining space will be increased if there is a wide opening between the two rooms.

There should be three bedrooms for reasons stated above. Two should accommodate two double beds each, if necessary. This means a minimum of 125 square feet and proper proportion and placement of openings. One bedroom may be smaller but should be large enough to accommodate a double bed. A bathroom or at least space for a future bathroom should be provided.

A work porch or workroom, according to the climate, should be provided, with a minimum area of 48 square feet. In warm climates there should be a living porch of not less than 80 square feet area, either separate from or combined

with the work porch. Where a living porch is provided, the living room can be used as a sleeping room.

Storage Space

Every bedroom should have a minimum clothes-closet area of 3 feet by 22 inches.

One closet, at least 3 feet by 24 inches, for outside wraps and general storage, should be near the most-used entrance to the house.

A linen and bedding closet, at least 2 feet by 22 inches, should be provided.

A closet 3 feet by 18 inches should be provided in the work-room or work porch for cleaning equipment and supplies, and some provision should be made for the storage of laundry equipment.

Kitchen Storage

There should be provided in the kitchen an enameled-iron sink 16 inches by 30 inches with work surface to the right of this sink at least 2 feet by 3 feet and to the left at least 2 feet by 30 inches. The drain should be built into a cabinet.

Below each work surface there should be a 6-inch drawer and a shelf dividing the remainder of the space, this shelf being 12 inches deep. Doors should be provided to this space below, and toe space is desirable. To provide the minimum storage space for utensils and supplies, three shelves should be built above the two work surfaces and sink except as these would interfere with windows. The bottom shelf should be at least 10 inches above the work surface. For reachability the third shelf should not be more than 70 inches above the floor. These shelves should be 12 inches deep except the lowest shelf above the sink, which should be only 4 inches deep.

Food Storage

Not less than 24 square feet of food-storage floor space should be provided in or near the house. This space should be ventilated and protected from freezing or excessive heat.

The floor should be braced sufficiently to support the load, and the ventilator screened. The size required will vary with the food-storage requirements of the area and the availability of satisfactory storage space in outbuildings. When fruit and root vegetables must be stored in this space, a minimum of 35 square feet of floor area is desirable. The storage area should have shelves spaced to hold the usual containers.

Arrangement for Privacy and Convenience

For privacy, doors should be provided to all bedrooms, bath, or toilet rooms. Doors to closets are desirable. Sole access to any room or bath should not be through a bedroom.

Outside doors and porches should give convenient entrance from the farm driveway and the path to the barn, and wherever possible should be on the sheltered side of the house. There should be a shelter over the most-used door.

The only way from the back door to the main part of the house preferably should not lead through the kitchen work area. If the kitchen must be used as a passageway, the doors should be so arranged that persons passing through will cross the work area as little as possible.

Light and Ventilation

The glazed-window area of each room should be not less than 10 percent of the floor area. Window area that can be opened must be a minimum of 5 percent of the floor area. More openings are desirable in warm climates. Full-length openings and additional screened openings below the windows are useful in some climates. Living room, kitchen, and bedrooms should have cross ventilation either through outside windows or doors or through another room. Cross ventilation of a bedroom should not be through another bedroom.

Electric Wiring

Where electric service is available or will probably be extended within a reasonable time, houses should be wired

when built. If the house is wired, the following outlets and switches are specified as the minimum desirable:

Ceiling lights in kitchen, work porch, and over dining area and in living room if separate, with wall switches at front and rear doors to control the nearest ceiling light.

Two double convenience outlets in living room, a double convenience outlet in the kitchen, and on the work porch.

A bracket light in the bathroom and a bracket light with a convenience outlet in each of the bedrooms.

Heating

In addition to the kitchen stove, provision should be made for a heater of adequate capacity, so that even when the outside temperature is 10° above the minimum for the preceding 10 years, the heater will maintain a minimum temperature of 65° F. at a level 3 feet 6 inches above the floor of the living room (and bathroom, if there is one). The heater should be so situated as to provide overflow heat to bedrooms and dressing areas. No range, ordinary stove, or furnace should be permitted within 3 feet of unprotected woodwork or wood-lath-and-plaster partitions. If such woodwork or partitions are covered with a sheet of metal or other fireproof material, a distance of not less than 18 inches is sufficient. Metal shields should be so attached as to preserve an air space behind them.

Flue area (inside the chimneys) should be not less than that of a standard $8\frac{1}{2}$ by $8\frac{1}{2}$ inch flue lining for flues serving a wood or coal range or a single heater. If range and heater are both to be connected to the same flue the minimum area should be not less than that of a standard $8\frac{1}{2}$ by 13 inch flue lining. Fireplace flue area should be not less than that of a standard $8\frac{1}{2}$ by 13 inch flue lining.

Fuel Storage

Space should be provided convenient to the house for storing not less than 1 month's supply of fuel.

Water Supply and Sanitation

A potable water supply should be either piped to a kitchen sink or available from a pump adjacent to the work porch.

A bathroom equipped with an indoor flush toilet, wash basin, and shower or tub should be provided if at all possible, or, at least, space should be provided for a future installation (except in areas where an inadequate water supply makes such facilities impractical). When the bathroom is equipped, a septic tank for sanitary waste disposal is necessary. When only a kitchen sink is provided, the drain should be connected with a dry-well disposal system or with underground tile at a safe distance from the water supply. A sanitary outdoor toilet should always meet the specifications set up by the Public Health Service and State or local health authorities.

Health and Safety

Wells, plumbing, septic tanks, outdoor toilets, electric wiring and fixtures, chimneys, heating installations, and construction in general should comply with recognized standards of health and safety. Plans for installation should be checked against State and local regulations if any are in effect for the area. Information obtained from the Rural Electrification Administration may be helpful in connection with electrical installations.

